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# Alberta Naturalist

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## COVER: "NATURE, A BOOK TO READ"

by Ludo Bogaert

Ludo is Past President of the Edmonton Bird Club, and a nature artist at the Provincial Museum and Archives of Alberta in Edmonton. His art work was featured in "Nature Canada", January/March, 1974: 8-11.

His cover story follows.

Sometimes one stumbles upon mysterious patches of scattered feathers in the woods, in fields under some willow-bushes, or along the bank of a stream twisting through the countryside.

Mysterious, yes, but only for the casual hiker. He who spends more time outdoors with a sharp eye and open mind is likely to solve these mysteries. Give it a closer look and some thought, as for instance in this case:

While walking along the bank of the Sturgeon River, I noticed a few tiny feathers on the ground. I soon discovered these feathers were of a Mallard duck. Some closer investigation revealed a faint trail of downy feathers going up the trunk of a fallen aspen poplar, and indeed at about seven feet off the ground was the evidence of a kill. But by what? Goshawk, Great Horned Owl or maybe a fur bearing predator?

Reconstructing the whole picture, the following story emerges:

The scene is in late fall, some snow covering the ground, the winding river covered with ice except for a few places where shallow water forces the current to move rapidly - preventing the ice sheet from closing - creating a hole. A few Mallards that have not yet left are congregated on the ice. Among them is likely some crippled bird whose alertness is not what it should be. A spot like this is soon known by predators, and I can imagine how at dusk three or four Mallards are huddled together at the edge of this hole.

From a tall, distant tree, a Great Horned Owl takes wing. After several unsuccessfulattempts, a different strategy is worked out.

Flying low, following the river, cutting corners here and there, the owl is nearing. Occasionally the faint nattering of a duck disturbs the otherwise quiet night.

Noiseless, coming in now, the Great Owl strikes at the nearest duck, a nice drake.

A flurry of wings, grasping talons and the alarming quack-quack of the other ducks, taking off in the night, is heard. At the scene, the owl is struggling with the heavy duck, dragging it up the bank to protective cover.

Here we are back at our starting point, where apparently the duck was pulled up the trunk of the tree, partially plucked and eaten. Some white wash and a very fluffy owl feather complete the story.

## OVERHEARD (44)

"I will speak to those people who seem continually determined to argue with one another, but whose objectives are in fact identical. These are hunters and those who would abolish hunting .... While these groups debate and infight over what constitutes proper use of wildlife resources, others continue the blind march of ecological suicide that must one day eliminate any choice we have in the matter of variety and numbers in wildlife. Let our common goal be the perpetuation of a variety of human expression in what is left of our natural world, and let our common enemy be those who would destroy this natural world and thereby eliminate a priceless potential for human experience."

Address to the American Wildlife Federation by Dr. Robert E. LeResche, wildlife biologist with the Alaska Department of Fish and Game, in "North Dakota Outdoors." (From Manitoba Naturalists Society Bulletin, February, 1975.)

## OVERHEARD (45)

'... ground squirrels and gophers annually destroy ten percent of each year's crops in California. This destruction has at times been so great that ranchers, townships and even counties have occasionally paid bounties of ten cents a head on gophers. It's too bad that Barn Owls can't collect their share of these monies and hire lobbyists to fight those .... wanting open seasons on practically everything alive!

Walker, The Book of Owls p.15

Submitted by D.A.E. Spalding

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## A CALENDAR OF THE SKIPPERS AND BUTTERFLIES OF BANFF NATIONAL PARK

by C.D. Bird

This is the first checklist of the Skippers and Butterflies known to occur within Banff National Park. It has been compiled from the literature and from specimens examined in various private and institutional collections. The order and names of the species is that of the latest list of North American taxa by dos Passos.

Each month is divided into three periods: 1-10 (early), 11-20 (mid), and 21 to the end (late). An "x" indicates one or more collections or sightings for a particular period. The earliest and latest reports are often of exceptionally early or late individuals. Males tend to predominate early in a species' flight period, females in the latter part.

Six of the eighty listed species overwinter: Nymphalis vau-album j-album, N. milberti milberti, N. antiopa antiopa, Polygonia satyrus satyrus, P. faunus rusticus, and P. zephyrus. Five other species are occasional migrants: Neophasia menapia menapia, Vanessa cardui, Nymphalis californica californica, Euptoieta claudia, and Danaus plexippus plexippus.

Six species that have been reported from the Park are excluded here as they need further confirmation: Hesperia pahaska pahaska (Pahaska Skipper), Melitaea malcolmi (Malcolm's Checkerspot), M. mayi (May's Checkerspot), Speyeria zerene garretti (Zerene Fritillary), Oeneis uhleri varuna (Uhler's Arctic), and O. alberta alberta (Alberta Arctic).

The first person known to have collected specimens in what is now the Park was Capt. Gamble Geddes who took some material in the Lake Louise (Laggan) vicinity on August 1, 1884. Thomas E. Bean was employed by the C.P.R. at Laggan from 1886 to early in the 1890's. While there he made extensive collections and later published some of his results in the Canadian Entomologist. Norman B. Sanson collected many specimens for the Park Museum while he was Curator from 1896 to 1930. This material has been examined by the writer and will be reported in a future issue of the Journal of the Lepidopterist's Society. Other persons known to have collected in the Park and whose data are incorporated herein are R.L. Anderson, C.D. Bird, J. Fletcher, B. Hocking, J. Legge, I.A.W. Mackenzie, Mrs. Nicholl, D. Shackleton, J. Scott, D. Threatful, N. Van Veen, and J. Watson. Insect collecting in the Park was allowed until 10 or 15 years ago but is now forbidden unless an individual is working on a serious project requiring Park material and has a permit.

The following data shows that the local flight period for the 80

| Scientific Name | Common Name | Apr | May | Jun | Jul | Aug | Sep | Oct |
|---|---|---|---|---|---|---|---|---|
| HESPERIIDAE | | | | | | | | |
| Polites coras | Coras Skipper | | | | x | | | |
| Polites draco | Draco Skipper | | | | x | | | |
| Hesperia comma manitoba | Manitoba Skipper | | | xx | xxx | xxx | | |
| Carterocephalos palaemon mandan | Arctic Skipper | | | xxx | xxx | | | |
| Pyrgus centaurae loki | Grizzled Skipper | | | x | xx | | | |
| Pyrgus ruralis | Ruralis Checkered Skipper | | x x | xx | x | | | |
| Erynnis icelus | Dreamy Dusky Wing | | | x | | | | |
| Erynnis persius fredericki | Persius Dusky Wing | | x x | xxx | xx | | | |
| PAPILIONIDAE | | | | | | | | |
| Parnassius phoebus smintheus | Clouded Parnassian | | | x x | xx | xxx | xx | |
| Papilio zelicaon gothica | Zelicaon Swallowtail | | | x | x x | | | |
| Papilio glaucus canadensis | Tiger Swallowtail | | x | x x | x | | | |
| PIERIDAE | | | | | | | | |
| Neophasia menapia menapia | Pine White | | | | | x x | x | |
| Pieris sisymbrii flavitincta | California White | | | x | | | | |
| Pieris protodice occidentalis | Western Checkered White | x | x | x | xx | xx | xx | |
| Pieris napi oleracea | Mustard White | | x | xxx | xxx | x | | |
| Pieris rapae | Cabbage White | | | x | xx | | | |
| Colias meadii elis | Elis Sulphur | | | | xxx | xxx | x | |
| Colias eurytheme eriphyle | Alfalfa Butterfly | | | xx | xx | xxx | xx | x |
| Colias interior interior | Pink-edged Sulphur | | | x | | | | |
| Colias scudderii gigantea | Giant Sulphur | | | | x | | | |
| Colias alexandra christina | Christina Sulphur | | | | xxx | xx | | |
| Colias pelidne minisni | Pelidne Sulphur | | | | xx | xx | | |
| Colias nastes streckeri | Nastes Sulphur | | | | xxx | x x | | |
| Euchloe creusa creusa | Creusa Marble | | x | xx | xx | | x | |
| Euchloe ausonides ausonides | Marbled White | | x | xx | xx | | | |
| LYCAENIDAE | | | | | | | | |
| Callophrys polios obscurus | Hoary Elfin | | x | x | | | | |

| Scientific Name | Common Name | Apr | May | Jun | Jul | Aug | Sep | Oct |
|---|---|---|---|---|---|---|---|---|
| Callophrys augustinus iroides | Brown Elfin | | xxx | x | | | | |
| Callophrys eryphon eryphon | Western Pine Elfin | x | x | xx | x | | | |
| Lycaena mariposa mariposa | Mariposa Copper | | | | xxx | xxx | x | |
| Lycaena helloides | Purplish Copper | | | | x | | | |
| Lycaena dorcas dorcas | Dorcas Copper | | | | xx | | | |
| Lycaena phlaeas arethusa | Arethusa Copper | | | | x | | | |
| Lycaena snowi snowi | Snow's Copper | | | | xxx | xx | x | |
| Lycaeides argyrognomon scudderii | Scudder's Blue | | | x | xxx | xx | | |
| Plebejus saepiolus amica | Saepiolus Blue | | | xx | xxx | x | | |
| Plebejus acmon lutzi | Acmon Blue | | | | | x | | |
| Plebejus aquilo megalo | Mountain Arctic Blue | | | x | xxx | xxx | x | |
| Everes amyntula | Western Tailed Blue | | | xxx | xxx | x | | |
| Glaucopsyche lygdamus couperi | Silvery Blue | | x | xx | xxx | | | |
| Celastrina argiolus lucia | Spring Azure | | x x | x x | | | | |
| NYMPHALIDAE | | | | | | | | |
| Limenitis arthemis rubrofasciata | White Admiral | | | | xx | | | |
| Vanessa atalanta | Red Admiral | | | x | | | | |
| Vanessa cardui | Painted Lady | | | x | x | | | |
| Nymphalis vau-album j-album | Compton's Tortoise-shell | | | | | xx | xx | |
| Nymphalis californica californica | California Tortoise-shell | | | x | | | x | |
| Nymphalis milberti milberti | Milbert's Tortoise-shell | | x | | x | x | x | |
| Nymphalis antiopa antiopa | Mourning Cloak | | x | | | x | xxx | |
| Polygonia satyrus satyrus | Satyr Angle-wing | | xx | | | | | |
| Polygonia faunus rusticus | Green Comma | x | | | | x x | xxx | |
| Polygonia zephyrus | Zephyrus Angle-wing | | x | x | x | xxx | xx | |
| Chlosyne damoetus | Damoetus Checkerspot | | | | x x | | | |
| Phyciodes tharos pulchella | Pearl Crescent | | | x | xxx | | | |
| Phyciodes campestris camillus | Meadow Crescent | | | xx | xxx | x | | |
| Euphydryas anicia capella | Anicia Checkerspot | | x | x | xxx | xx | | |
| Euphydryas editha beani | Bean's Checkerspot | | | | xxx | | | |
| Boloria selene atrocostalis | Silver-bordered Fritillary | | | x | x | x | | |

| Scientific Name | Common Name | Apr | May | Jun | Jul | Aug | Sep | Oct |
|---|---|---|---|---|---|---|---|---|
| Boloria frigga saga | Frigga Fritillary | | x | xx | x | | | |
| Boloria epithore borealis | Epithore Fritillary | | flight period unknown | | | | | |
| Boloria freija freija | Freija Fritillary | x | xx | xx | | | | |
| Boloria alberta | Alberta Fritillary | | | | xx | x | | |
| Boloria astarte astarte | Astarte Fritillary | | | x | x | xx | | |
| Boloria titania grandis | Titania Fritillary | | | x | xxx | x x | | |
| Boloria eunomia dawsoni | Bog Fritillary | | | xxx | xxx | xxx | | |
| Boloria eunomia nichollae | Nicholl's Fritillary | | | | | x | | |
| Speyeria atlantis beani | Bean's Fritillary | | | x | xxx | xx | | |
| Speyeria atlantis helena | Northwestern Silverspot | | | xx | x | | | |
| Speyeria hydaspe sakuntala | Hydaspe Fritillary | | | | x x | xxx | | |
| Speyeria mormonia eurynome | Mormon Fritillary | | | x | xx | xx | | |
| Speyeria cybele pseudocarpenteri | Great Spangled Fritillary | | | | | x | | |
| Euptoieta claudia | Variegated Fritillary | | | | | x | | |
| DANAIDAE | | | | | | | | |
| Danaus plexippus plexippus | Monarch | | flight period unknown | | | | | |
| SATYRIDAE | | | | | | | | |
| Coenonympha inornata benjamini | Ringlet | | | | x | | | |
| Cercyonis oetus charon | Small Meadow Brown | | | | xx | xx | | |
| Oeneis chryxus chryxus | Chryxus Arctic | | x | xx | xxx | | | |
| Oeneis jutta chermocki | Jutta Arctic | | | xxx | xxx | x | | |
| Oeneis melissa beanii | Bean's Arctic | | | x | xxx | | | |
| Oeneis polixenes brucei | Bruce's Arctic | | | | xx | | | |
| Erebia disa mancinus | Mancinus Alpine | | | xx | xx | | | |
| Erebia discoidalis macdunnoughi | Red-disked Alpine | | x | x | | | | |
| Erebia epipsodea epipsodea | Common Alpine | | | xxx | xxx | x | | |
| TOTALS 80 species | | 0 | 4 7 16 | 15 18 24 | 37 35 46 | 43 31 21 | 19 9 8 | 7 1 0 |

resident Skippers and Butterflies is about 165 days with a peak in numbers (46) in mid July. In comparison, the 72 species known from Calgary fly over a 200 day period and peak (45 species) in mid June; while the 40 species known from above timberline on Plateau Mountain fly over an 85 day period and peak (28 species) in early August.

Bruce Gordon of Parks Canada in Banff is thanked for making the N.B. Sanson collection available for study.

## COLONIAL BIRD STUDIES

by Students of Cardston High School

Dr. Keith Shaw, biology teacher at Cardston High School, Cardston, Alberta sent the following four notes on colonial birds in Southern Alberta by his grade 12 students. These notes provide a valuable record of the 1975 status of these colonies. However, we must caution groups of people from visiting such colonies, especially those of pelicans and cormorants, during the nesting season, as such visits can unwittingly cause severe damage through predation, adults killing wandering young, and exposure of newly hatched birds to excess sun.

M.K.M.

## RING-BILLED AND CALIFORNIA GULLS ON ROSS LAKE

On June 7, 1975 a group of Biology 30 students from Cardston High School surveyed the mixed nesting colonies of Ring-billed and California gulls on Ross Lake. This lake is located in the Milk River Ridge eight miles northeast of Jefferson in southwest Alberta. The lake area is approximately 1.5 square kilometers. The gulls were nesting on two islands on the lake.

The smaller island was 27 meters long by 14 meters wide, and was 250 meters from shore, with the high point less than one meter above waterline. There was little vegetation. In the nesting colony there were 80 mests, with clutch size ranging from one to five, averaging 2. There were 78 chicks and 161 unhatched eggs. There were four dead adult gulls on the island; three Ring-billed and one California.

The larger island was 80 meters long by 28 meters wide and was five meters from shore. This island had more vegetation than the smaller, including a few trees.

There were 482 nests, with clutch size ranging from one to six and average two. There were 48 live chicks and 1,113 eggs. In addition there were 19 dead chicks, most of which had the head severed from the body and many broken eggs with embryos still within were scattered about. There were 22 dead adult gulls on the island; 14 Ring-billed and eight California. No attempt was made to discriminate between the nests, eggs and young of the two gull species.

Kathy Berezay
Allan Quinton
Terry Sheen
Kye Powers
Cindy Olsen
Tom Berry

## RING-BILLED AND CALIFORNIA GULLS ON ST. MARY RESERVOIR

On May 30, 1975 our Biology 30 project group went to survey the California and Ring-billed gulls in a mixed colony on an island on St. Mary Reservoir in southwest Alberta. The island is situated some distance from shore and secures the nesting of the gulls. The island area is approximately 5,370 square meters excluding the beach. The ground is level and spongy. Clumps of coarse grass cover the island, and a few dead chokecherry bushes were found.

The numbers of nests, eggs and chicks were estimated by random sampling in eight different areas. Later calculations indicated populations of 12,221 eggs, 402 chicks, 4,835 nests and 9,670 nesting birds on the island. There seemed to be additional non-nesting birds on and near the island. No attempt was made to discriminate between the two gull species as far as nests, eggs and young were concerned.

Blair Beswick
Sharon Draper
Desley Parkes
Lorraine Broadhead

## DOUBLE-CRESTED CORMORANTS ON ST. MARY RESERVOIR

On Friday, May 30, 1975 a small group of Cardston High School Biology 30 students went to survey a nesting colony of gulls occupying an island on St. Mary Reservoir in southwest Alberta. As the island was approached approximately 30 Double-crested Cormorants (Phalacrocorax auritus) were seen flying about the island and in the vicinity. This sighting was later reported to Cardston High School biology teacher Dr. Keith Shaw who went to the island on June 7 and found the cormorant nesting site. The colony consisted of 19 nests, 14 of which were active with clutches of one to four chalky blue eggs. Each nest was constructed mostly of plant material including some green grass blades as nest lining and stood from six to ten inches high. The nest site was in the open among the gull nests. No trees or shrubs, aside from a few dead chokecherry bushes, were near the colony. Clumps of coarse grass were scattered throughout. The nests were rather close together, some even touching, in a circular area of diameter seven meters. Twenty-eight cormorants were sighted on and near the island. As soon as the observers left the island the cormorants returned to the nesting site.

Lorraine Broadhead
Blair Beswick
Sharon Draper
Desley Parkes

## RING-BILLED AND CALIFORNIA GULLS ON SHANKS LAKE

Shanks Lake is located about six miles northeast of Del Bonita in southwest Alberta. In the past gulls had nested on a peninsula in the northwest corner of the lake. This year the only nest on the peninsual was that of a pair of Canada Geese. The nesting gulls had moved out to a low island about 150 meters south of the peninsual. This island was approximately 12 meters wide by 13 meters long. Both Ring-billed and California gulls were nesting on the island. There were a total of 43 nests of both species with each nest territory being about three square meters. Clutch size averaged three. Of the 43 nests 10 were actually built up above the water. A total of 37 chicks had hatched, seven of which were dead. Ten to fifteen eggs were broken or were out of nests.

Three dead adult gulls were found; two California and one Ring-billed. The field work was done on June 11, 1975.

Don Yuill
Ralph West
Royce Leavitt
Monty French
Ken Henn

## 1974 FALL MIGRATION HIGHLIGHTS - CENTRAL ALBERTA

by Jim Wolford

Despite a very prolonged and dry fall, wet months of June and July maintained the high water levels seen in the spring. After a brief cold spell and snow in late September, beautiful weather prevailed until a blizzard hit on December 21. Small ponds were mostly iced up by November 6, and only a few open leads remained on the larger lakes on November 23.

WATER BIRDS - Grebes were abundant in our area until about September 24 - last sightings ranged from October 9-20 for all species. Only one Common Loon was reported, on August 28.

Whistling Swans and Snow Geese apparently had a poor nesting year, for low numbers of dark birds were seen. Swans were present October 4 - November 11, and Snow Geese September 7 - November 10; only 3 Ross' Geese were reported. No large numbers of Canadas or Whitefronts were seen; Canadas were last seen November 18, and Whitefronts passed through from August 21 to October 6.

Blue-winged Teal mostly left by the last week of September, but most other species of ducks remained in fair numbers through early to late November or even later. Two Oldsquaws appeared on Hastings Lake November 11, and Hooded Mergansers were seen 3 times from September 17 to November 10. Coots were abundant until October 20, and the last was seen November 11.

Up to 2 Parasitic Jaegers visited Tofield September 15-24. Herring, California, and Ring-billed gulls were last seen November 8-11, while corresponding dates for Franklin's and Bonaparte's gulls were September 22 and November 9-25 respectively.

WADERS - Great Blue Herons and Bitterns were mostly gone by the end of September; late Bitterns were seen to October 20. Sixteen Black-crowned Night Herons were still present on the very late date of October 13. Sandhill Cranes were seen from August 29 to September 29, with one straggler staying to October 14.

As seems usual in our area, several species of shorebirds were "back" in mid-to-late July -- Semipalmated Plovers, Greater and Lesser Yellowlegs, Pectoral Sandpipers, Dowitchers, Hudsonian Godwits, and unidentified "peeps". Several large flocks of 8-18 Killdeer were seen, and two of these groups remained as late as mid-November. Golden and Black-bellied Plovers were last seen October 27, and a Dunlin was with the latter on that date.

Snipe were very abundant in loose flocks from August 25 to October 14; they were last seen October 27. Knots were reported only once, September 22. Long-billed Dowitchers peaked from September 8 to October 20 (last October 26), and Short-bills were identified only on October 12. Three Western Sandpipers were seen at Tofield August 25.

RAPTORS - One Turkey Vulture was seen near Dunstable August 30. Sharp-shinned and Cooper's hawks were last reported September 19 and 29 respectively. A very late Broad-winged Hawk was seen near Valleyview November 12.

The peak movement of Red-tailed Hawks coincided with that of Swainson's in the 2nd and 3rd weeks of September, but it continued into early October -- the last seen was on October 20. Rough-legged Hawks peaked September 22 - November 11.

At least 50 Bald Eagles were reported from September 15 to December 24, with large numbers October 19 to November 30 -- 16 were seen on the ice at Cooking Lake November 17. Marsh Hawks were common until October 26, and the last sighting was on November 17.

A Gray Gyrfalcon was early at Tofield October 9, and immature Prairie Falcons were there September 15 and October 19. Peregrine Falcons were reported in the middle two weeks of September and late November. Kestrels declined after early October and were last seen November 13. The last report of Merlins, disregarding those in Edmonton, was November 10.

Possibly the greatest highlight was the early and massive movement of Snowy Owls. The earliest birds were seen October 1-2; then peak numbers occurred from October 14 to late November. The largest numbers seen were 54 and 46 at Tofield October 20 and 27. Short-eared Owls were fairly common until late October.

OTHERS - Ruby-throated Hummingbirds were last seen August 28, Kingfishers September 22, Flickers October 6, and Sapsuckers September 15. A late Least Flycatcher was seen September 20, and Horned Larks were reported only twice, to September 22. Large numbers of swallows (Barn and Bank) were seen only on September 8, and late Tree Swallows were seen September 16.

The last crow was seen November 3. Red-breasted Nuthatches moved by us mostly from September 29 to October 20, and reports of White-breasts began September 5. Brown Creepers and Boreal Chickadees were first seen October 6 in Edmonton.

A Mockingbird was in Edmonton in mid-October. Robins were mostly gone by October 5. A Varied Thrush and 2 Townsend's Solitaires were in Elk Island Park October 20. Water Pipits were abundant September 8-24 and last seen October 12. Starlings decreased rapidly after October 13.

The last sightings of Warblers were of Wilson's and Yellow-rumped October 5-6. Brewer's and Rusty Blackbirds peaked from September 8 - October 12 and were last seen October 20.

Golden-crowned Kinglets, Bohemian Waxwings, and Snow Buntings first appeared September 16, October 12, and October 4, respectively. Evening Grosbeaks, Pine Grosbeaks, and Common Redpolls were first seen September 2, November 2, and October 26 respectively. Pine Siskins apparently all departed after October 6. A late Goldfinch was seen October 5.

Two large flocks of Savannah Sparrows were seen in stubble fields September 8, and the last seen was on September 24. Juncos and Tree Sparrows peaked from September 20 to October 18. Large numbers of Chipping Sparrows were in Edmonton August 5, and a Harris' Sparrow visited Edmonton in late September.

White-throated Sparrows peaked September 7-29 (last seen October 20), and Lapland Longspurs were present August 20 - November 17 with peaks September 15 - October 12.

## NOTE RE: ENCLOSURES

Two brochures are enclosed with this Alberta Naturalist. Please give them to a friend who is interested in nature or environment protection.

## WINTER BIRD HIGHLIGHTS 1974-75 - CENTRAL ALBERTA

by Jim Wolford

November, December and January were very mild. February's cold first half made the month a bit colder than normal, and March was generally mild except the last few days of the month. Snow to the end of February was 10 inches below normal and 40 inches below last winter.

WATER BIRDS - On the river in Edmonton, species and maximum numbers seen were 109 Mallards, 54 Common Goldeneyes, 1 Black Duck, 1 Ring-necked Duck, 3 Lesser Scaup. The same for Lake Wabamun were about 400 Mallards, 200 Common Goldeneyes, 2 Pintails, 12 American Widgeons, 3 Gadwalls, 1 Teal, 8 Redheads, 11 Lesser Scaup, 3 Ring-necked Ducks, 3 Canvasbacks, 5 Buffleheads, 8 Coots, and 1 Killdeer. Of course, just how many of these birds survived the winter is an open question.

RAPTORS - At Wabamun no eagles were seen, but an immature Bald Eagle was in Edmonton for at least half the winter. Rough-legged Hawks were not observed after December 29. Goshawks were sighted 13 times. Merlins were seen frequently in Edmonton, as usual, but one in early January had falconers' jesses trailing from the legs -- the conclusion must be that some illegal holding of birds of prey is still occurring. Peregrine Falcons were reported twice in February, near Pigeon Lake and Cochrane; this species almost never is seen in our area in winter.

No large concentrations of Snowy Owls, such as had been seen in October and November, were reported. The only areas where the big white birds were common were Edmonton-Leduc-Calmar, Morinville-Legal-Westlock, and probably the Peace River area. Hawk Owls were seen out of their normal breeding areas only 4 times, as far as Daysland, all in early winter. A Great Gray Owl was in Elk Island Park, and a Barred Owl was reported from Rycroft. Nine Short-eared Owls were seen from early December to late March.

OTHERS - One belted Kingfisher apparently overwintered along the Clearwater River south of Rocky Mountain House, and one Flicker was in Edmonton.

Three-toed Woodpeckers were rare in our area this winter - one Black-backed was near Leduc and six Northerns in Edmonton and near Bon Accord; none were reported after early January.

Gray Jays were seen twice in the Edmonton area and once near Pigeon Lake. Blue Jays were seen almost as far west as Hinton. A partial-albino Magpie was seen several times in Edmonton. Ravens apparently did very little wandering this year, but a single Clark's Nutcracker was reported near Edmonton in early December. Boreal Chickadees were seen from Pigeon Lake to Edmonton to Bon Accord and elsewhere, but none were seen on Edmonton's Christmas Count.

White-breated Nuthatches were seen in six localities from Pigeon Lake to Edmonton, Wabamun, and Elk Island Park. Red-breasted Nuthatches stayed unusually late and in good numbers in our area -- 15 were seen on the Edmonton Christmas Count, and others were seen as far north as Slave Lake.

Likewise, but even more pronounced, Golden-crowned Kinglets were extremely abundant this winter -- a record 50 were seen on the Christmas Count, and other localities were similar to those above for kinglets. Three singing Ruby-crowned Kinglets were seen south of Hinton as late as mid-December. Brown Creepers were seen only five times.

Only one Cedar Waxwing was seen in Edmonton. Northern Shrikes were reported 16 times from Entwistle to Vegreville to Stettler. Robins were seen eight times, all in Edmonton. Up to 90 Starlings were reported in Edmonton and some also in Vegreville. Rusty Blackbirds were seen near Ft. Assiniboine, Edson and Wabumun.

Pine Grosbeaks were rather scarce this year, and only 1 Pine Siskin was seen. White-winged Crossbills were widespread, from the mountain parks to Cooking Lake and Stettler; but Red Crossbills and Purple Finches were reported only once each, on the Christmas Count (December 15). One Gray-crowned Rosy Finch spent the winter at Pigeon Lake.

Juncos were seen twice in Edmonton. Snow Buntings were well reported, one bird as far north as Fawcett; one flock of 4500-5000 was seen near Elk Island Park.

# HIGHLIGHTS OF SPRING, 1975, BIRD MIGRATION

by Rudi Butot

## PART I: SOUTHERN ALBERTA

The early waterfowl migration of first arrivals was off by approximately one week, but the late spring had a greater effect on the main body of swans and geese. Only small numbers of Whistling Swans were reported and except for one lonely sighting of a Snow Goose near High River the main migrating body must have passed over us. Trumpeter Swans were, however, more abundantly reported this year then in previous years. The first Great Blue Herons were reported from Carseland on April 6, while the first Black-crowned Night Heron was seen in Calgary on April 16. White Pelicans (non breeding) have again been reported massed in the hundreds at McGrogor Lake in July to while away the summer hours. Several rarer species seen this spring were a single Hudsonian Godwit and two Dunlins and a single Ross's Goose, all near the Chestermere lake area. A report of a European Wigeon in company with its American cousins came from Carseland on April 12. The first reported sighting of Double-crested Cormorants was on May 10 near Brooks. Cinnamon Teal reports were fairly numerous for the Calgary area, while a pair of Harlequin Ducks was seen on June 14 near Bragg Creek. Eight American Golden Plover were first seen on May 10 near DeWinton, while fifteen Black-bellied Plover were reported on May 25 from Irricana. Because of the mild winter, reports of Kestrel and Marsh Hawk were already received during the late winter months. Short-eared Owls showed a noticeable upturn during February - April, after a virtual total absence last year. One Snowy Owl apparently could not make up its mind about a return to the Arctic and was seen sitting on a fencepost May 5. A Lewis' Woodpecker was seen in Calgary May 15, and Yellow-bellied Sapsuckers were well reported, with the first report on May 6 from Calgary. A single Burrowing Owl was reported April 12 from the Aldersyde area. Gulls arrived in southern Alberta, or at least were reported, in the following order: California on March 28, Ring-billed one day later on March 29, Herring Gull on April 10 and Franklin's on April 11, all from Calgary, while a single immature Bonaparte's was seen on May 17 at Delacour. The first Common Tern report is from the same place and date as the Bonaparte's, while the Black Tern was first seen on May 11 near Langdon. First Swallow reports went as follows: Tree Swallow on April 13 in Calgary, Barn Swallow on May 4 from Chestermere, Rough-winged on May 11 and Cliff

Swallow on May 12 both from Calgary, the Purple Martin on May 15 also from Calgary. The main influx of Cedar Waxwings took place during the first week of May in Calgary, while Say's Phoebes were reported from Nanton on May 4 a full week behind the first report from the Little Smoky area much further to the north. Brown Thrashers were well reported with the first sighting on April 27 from Calgary. Four Long-billed Marsh Wrens were reported from DeWintonon May 10 while three Rock Wrens were sighted near Nanton June 6. The Thrushes put in their first appearances during the first two weeks of May in Calgary. The first Mountain Bluebird report came from the Millarville area on March 21, while only rarely reported on species such as Philadelphia Vireo and Common Yellowthroat were seen in Calgary on June 4 and May 9 respectively. From Exshaw came the first report of a Dusky Flycatcher on May 25, while Cochrane had the first reported Veery on May 14. From Longview came first reports for Cape May and MacGillivray's warblers both for June 14, while a Bay-breasted Warbler was seen near Erskine on July 12. The first reports on Bobolink as well as Western Meadowlark came in from Millarville on June 8 and March 28 respectively. Three Indigo Buntings were seen near Water Valley on May 25 and a single Lazuli Bunting on June 1 near Longview. A female House Finch was seen in Calgary from April 28 - May 8, the third sighting for the city. The previous two sightings had been of a male in the spring and fall of 1973. A Rufous-sided Towhee and a Lark Bunting were also first reported from Calgary on May 21 and April 17 respectively, as were a Harris' Sparrow May 9 and a Swamp Sparrow on April 27. The first Chestnut-collared Longspur was seen near Hussar on April 26.

More detailed tabulations of the spring period can be found in the Calgary Field Naturalist bulletins.

## SIGHTING OF WANDERING JAEGER

by Albert Bishop
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(Editor's Note: Although jaegers are now regularly reported at Beaverhills Lake, all sightings, whether or not the species is identified, in Alberta should be reported, especially away from Beaverhills - M.K.M.)

On Sunday, August 17, 1975, at about 8:00 a.m., I was trolling on the Upper Kananaskis Lake in Twp 19, Range 9, W5.

Flying towards me I noticed a rather dark bird somewhat smaller than our usual gull, with long slender wings in proportion to its body size. As it came opposite my boat at less than 100 feet distance, the most striking feature was its tail. Out of a very short dark tail streamed two intertwined dark feathers at least eight inches beyond the main tail. They were not stiff like that of a maypie, but limp like crepe paper or the tail of a man-made kite. Due to the bird's long wings in proportion to it's body, as it flew the body moved up and down with each wing stroke, and the tail feathers followed with an undulating motion - most remarkable.

When opposite the boat, the bird turned away, backlit against an overcast sky, so I could not judge the exact dark color, but it had a white collar about two inches wide between the body and the neck.

On coming to shore for breakfast, I identified the bird from "Birds of Alberta" as a jaeger, and realized its rare presence here. A search later in the morning could not relocate it. On the advice of a friend, I am reporting this sighting to you as a matter of interest.

## MALE WOOD DUCK COURTING FEMALE MALLARD

by D.V. (Chip) Weseloh, and Linda McKeane Weseloh

While driving from Edmonton to Calgary on May 7, 1975, we observed a male Wood Duck in the company of, and apparently courting, a female Mallard. The two ducks were sitting in a mud field along the roadside of Highway #2 at the southwest corner of the intersection with Highway #42, approximately 6 miles south of Red Deer. We had just turned onto Highway #2 from Highway #42, but pulled over to the side of the road immediately upon seeing the 2 ducks. Initially they were less than 30 feet from our car, but they walked away rather quickly after we stopped.

The male duck was unmistakeably plumaged: it had a predominantly dark green but multicolored, tufted head with two white "chin straps"; its bill was reddish in color for approximately the basal one-third; its breast was chestnut colored and it had a white vertical stripe on the shoulder just ahead of the folded wing. In flight the male duck had a square tail and a slightly downward pointing bill. We are both very familiar with the Wood Duck from eastern Canada. The female was noticeably larger than the male and had a uniformly mottled plumage, orange bill and feet and a blue speculum bordered with white.

As the two birds walked away from our car and across the mud field, they remained in close proximity to one another; the male always behind the female. They walked about 150 yards diagonally away from us to a small grass-choked pond. As we pulled the car ahead to get a better view, they took flight. The female departed first, and then the male. They stayed close to one another in flight, the male just behind the female.

While the mere presence of a male Wood Duck in the company of a female Mallard does not signify an inter-specific pair bond it does give one cause to wonder. Mallards, the most commonly inter-breeding duck species, have been alleged to hybridize with no less than 45 species of Anatidae including Gadwall, Pintail, Black Duck, American Wigeon, Shoveler, Green-winged Teal and other (Johnsgaard, 1965; Kortwright, 1942). The Wood Duck, second only to the Mallard, has hybridized with 26 species. However, as is well-known and pointed out by Sibly (1957), in the genus Anas (of which the Wood Duck is a close relative) males will often court the female of any species! It is the female's instinctive "choice" of a male of her own species which usually prevents hybridization. We have been able to find no allusion in the literature to whether Mallard hybrids are usually a result of Mallard males breeding with non-Mallard female or of non-Mallard males breeding with Mallard females. In cases where the Mallard is decidedly the larger of the two species involved in the hybridization we would suspect that it is the Mallard male that is involved in the larger percentage of the successful hybridizations.

Why was this male Wood Duck in the company of the female Mallard? Wood Ducks are a rare summer visitor to Alberta (Salt and Wilk, 1966). Any male Wood Duck on the prairies during the spring would probably have a difficult time locating a female of its own species. It would seem that this male was attempting to court (and eventually mate) with any female that would be receptive. It is very unlikely that his attempts would be fruitful, 1) because the female Mallard would be unable to "recognize" the courtship activities of a male Wood Duck and 2) because any unmated male Mallard would (could) physically outcompete the Wood Duck for the attentions of the female.

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## NATURALIST' BOOKSHELF (13)

by Martin K. McNicholl

Transactions of the thirty-eighth Federal-Provincial Wildlife Conference, Victoria, B.C. June 25 to 27 to 27 1974. Environment Canada, Ottawa, 1975. 135 pp.

This book is a compilation of the proceedings of a conference I attended on behalf of FAN, and which I briefly discussed earlier (Alberta Nat. 4(3):83-84, 1974). My intention here is to review the proceedings primarily in the light of how they appear to reflect current trends in the thinking of wildlife management agencies in Canada, and how this might affect the interests of naturalists.

In general the book follows the order of presentation at the conference with little, if any, editing. Thus position papers relating to topics covered in panel discussions are not found with the panel presentations, and workshop presentations are at times little different from the report of the chairman of the workshop reporting back to the conference. Proof reading was good, as I found only two or three typing errors in the whole book. The book consists of a summary of the conference, a report on action since the last conference on recommendations made then, reports of various agencies, guests, and special committees, 3 panel discussions, a symposium, 3 position papers, and a list of delegates and guests.

As I pointed out in my earlier summary, the conference showed signs of increased recognition of the importance of non-consumptive uses and users of wildlife. This impression is even stronger after reading the Transactions, as the non-consumtive user permeats all discussions, the symposium, and most reports.

Action, however, is slow, as reflected in action on "recommendation 4" of the 37th conference (p.7), "That the conference endorse the further pursuit of the compilation of wildlife - based commerical statistics to include information on non-comsumptive users ...." Problems of jurisdiction and in defining and enumerating non-consumtive users had resulted in "very little progress."

Governments are notoriously slow in taking action, so the comment on p.6 (item 13) commending the "committee to consider a program for humane trap research, development and trapper education" is understandable. The committee, formed at the last conference, had defined objectives and hired a coordinator. In this age of so many urgent pressures on the environment, however, this rate of progress will be far too slow for action on many problems.

Reports - Two reports on waterfowl were given by F.G. Cooch, one a proposal for more effective and efficient methods of setting hunting seasons and bag limits; the other on current status of waterfowl in Canada. The latter is hardly encouraging. Some increases in population are reported or predicted, but many populations have declined, and habitat deterioration remains a serious problem. This is reflected in the fact that although a greater proportion of hunters are experienced people, they average fewer birds killed.

The Canadian Wildlife Service Report by A.G. Loughrey shows that CWS is still heavily involved in research on hunted species of birds and mammals, but also increasing involved in work on others, such as seabirds, larids, loons, pesticides, raptors, and others. An impact study on the area to be inundated or otherwise affected by the massive James Bay project appears to be waterfowl oriented, rather than based on the entire fauna and flora of the area, but most other impact studies appear to be more broadly based. Unfortunately the Breeding Bird Survey, involving many volunteers, is not even mentioned. Increased attention to public relations is evident in a revamping of the "Hinterland Who's Who" series, the production of two feature films, and the development of interpretive centers. Similar reports on the activities of the provincial agencies would have been useful.

The report of the Canadian Wildlife Federation is devoted entirely to its participation in National Wildlife Week. Ted Mosquin's report on the Canadian Nature Federation is a succinct summary of CNF's recent activities, which are presumably familiar to readers of the Alberta Naturalist. Ducks Unlimited (Canada) reports on a variety of construction and biological projects across Canada.

The report of the Canada Fur Council is primarily concerned with plans to "combat anti-fur publicity," and to a lesser extent promotion of more humane trapping and better handling of pelts. The lengthy report of the U.S. Fish and Wildlife Service, in actual fact their presentation to the Senate Budget Committee, shows similiar trends to those found in Canada. Other reports include that on humane trapping mentioned above, one on the desirability of publishing a journal, one on Polar Bear research and management, and one on caribou preservation.

Panels - The first panel discussed the issue, "Should landowners be compensated for wildlife damage?" Panelists represented rachers (H. Blazowski), farmers (R. Reynolds), wildlife officials (G. Stringer), and hunters (E. Mankelow). All panelists agreed that overall wildlife damage is slight, although individuals may suffer severe damage; and that extermination of problem species is undesirable. Emphasis should be on prevention first, control second, and compensation third. Stringer differed from the others in advocating little if any compensation, pointing out that people in problem areas are probably not making the most logical use of the land, and thus should be willing to gamble with wildlife problems or leave. Four discussion groups followed the panel, in which the same general points were re-emphasized. Ontario reported on compensation for wolf damage, showing that the hardest job was identifying the predator - dogs were far more often guilty than wolves. In Manitoba compensation for waterfowl damage to crops was though preferably to control or in some instances even prevention. In Alberta emphasis was on a balanced approach involving prevention, control, and compensation. The case of the bears in the Peace River area was mentioned to illustrate the need to keep the public informed on programs being conducted. In B.C.'s presentation on compensation for predator damage, Stringer once again emphasized his opposition to compensation in most circumstances.

The second panel considered the problem of the "unethical hunter." Speakers consisted of a law enforcer (W. Miller), judge (Roderick Haig-Brown), hunter (W. Otway), and landowner (M. Kelly). Major points raised were the increase in damage to property by hunters, difficulties in enforcing laws, need for proper and careful presentation of evidence against offenders, need for greater education of the hunter in appreciation of the total outdoors, and likelihood that all hunting will be stopped if the unethical hunter is not culled from hunting ranks. Four panels again discussed specific aspects of this issue.

Two of these were on hunter training programs, in Quebec and in Germany, both re-emphasizing the need for greater education far beyond the level of firearms training. Landowner-hunter conflicts and methods of reducing them in Saskatchewan were idscussed in a third group. Perhaps the most interesting discussion was that considering ways in which current management practices foster unethical hunting. For example, bag limits tend to be treated as goals to be attained rather than upper limits on numbers killed. Many of the points raised in these discussions and presentations were again summarized in a paper, "The unethical hunter" by Delwin E. Benson near the end of the book.

The final panel - "Use of social sciences in wildlife management" consisted of a presentation by Roger N. Clark discussing the need for involving social science and social scientists in wildlife programs, and the difficulties (especially in communication) involved in doing so. Workshops following the presentation considered methods of defining needs and desires of the public concerning uses of wildlife, difficulties in defining these (especially non-comsumptive uses), and methods of working for and with the public on wildlife programs. D.A. Benson summarized his ideas on long-range goals for the Canadian Wildlife Service in studies of wildlife in relation to socio-economic needs and goals in a paper at the end of the book.

Symposium - The highlight of the book and the conference is the symposium on "Wildlife in an urban setting," consisting of four papers. The first by always eloquent R. Yorke Edwards, "Wildlife in an urban setting. Wildlife in the City" points out that we have some wildlife even in the worst parts of cities, and abundant examples show how little we need to do in order to have much more. However, we need much more baseline data in order to understand the needs of each species we wish to encourage. P.C. Naftel's presentation on "The Wascan example" discussed problems and awards in having a beautiful park in the heart of Regina with a resident, tame non-captive flock of Canada Geese. C. Rieck's presentation on Washington State's new non-game program showed that his state is in the forefront of dealing with non-consumptive uses of wildlife-studying raptors, salamanders, turtles, colonial birds, etc., and acquiring land to preserve endangered species. Finally G. Gibson discusses the potential role of zoos in fostering good attitudes towards wildlife. A paper by David Ealer on Ontario's program for urban and non-game wildlife supplements the symposium.

Much more could be said about the symposium and panels, but the main point to be noted is the decrease in emphasis on destroying "vermin" and the increase in emphasis on non-consumptive users of wildlife. We still have a long way to go, but if this trend continues we can look forward to an exciting change in attitude towards wildlife in Canada. All naturalists are urged to do their part in bringing this about.

## NATURALISTS' BOOKSHELF (14)

by D.V. (Chip) Weseloh

Birds of the Oshawa - Lake Scugog Region Ontario. Ronald G. Tozer & James M. Richards. The Alger Press Ltd., Oshawa, Ontario. 1974. 382 pp.

One may wonder at the appropriateness of a review of an Ontario regional bird account in a Western Canadian Provincial Naturalists' publication. But just as we all relish "The Birds of Alberta" when in Alberta and "Vancouver Birds" when in Vancouver so is it of value to know of other regional accounts.

Ontario is a peculiar province when it comes to the documentation of its bird life. It has no popular, readily available account of its bird life on a provincial basis. It is, however, richly endowed with comprehensive regional, county and even township avifaunal accounts, as the reference list of this new publication shows.

In compiling this book, Tozer & Richards intended it to be an account of "such things as relative abundance, seasonal occurrence, migration periods, local distribution & breeding status of the Region's 308 species .... and can be used as a local supplement to a good field identification guide." It is not a field guide, was not intended as such and should not be judged or criticized as being one. The book is illustrated with black and white photographs as well as a number of line drawings by Barry Kent MacKay of Toronto.

The region covered by the account is not delimited by any political boundaries. Rather it is that area approximately 10 miles either side of a line from the city of Oshawa to Lake Scugog, Ontario. The region lies about 35 - 50 miles NE of Toronto and has Lake Ontario as its southern boundary.

Any regional bird compiler would do well to follow the format of Tozer & Richards. In addition to the species accounts, there is an extensive discussion of 35 habitats and special areas which occur in the region. The ornithological history of the area, going back to 1850, is discussed and referenced.

The contents of the species accounts has been most succinctly given by the previous quote from the authors. After summarizing the status and migration in each species account, the authors list locations, dates and individuals by whom the species was seen. Nesting data, seasonal movements and other life history data are included where available. Full particulars are given for the sightings of rare, uncommon or hypothetically classified species. I was very glad to see that species for which either specimen or reliable sight records existed were included as valid records for the region. Less well substantiated sight records were included but as hypothetical for the region.

The book is concluded with eight appendices and several of these are very worthwhile reference works. The most valuable of these accounts, in my estimation - and on this account I may represent a biased sampling of the population - is an extensive discussion of the occurrence and status of the Little Gull (Larus minutus) in the region. A discussion of this bird is no more properly placed or written of in any regional account than the present one. The only known nesting sites of this gull in the entire New World come from the Oshawa area and Jim Richards has done extensive photographic studies of the species in that area. Also included in the appendices are: a regional check-list, regional Christmas Bird Count records, a list of museum and collection specimens from that area, waterfowl banding records from the Oshawa Second Marsh (reported to be the fifth largest banding operation of its kind in North American with over 26,000 birds banded to date), details of an Eastern Bluebird Nest-box Project and, finally, a discussion of Brown-headed Cowbird parasitism in the region. To conclude, the book is well referenced but not distractingly so and there is an extensive regional bibliography at the end.

Dr. Tozer and Mr. Richards are to be complimented on their work; it satisfies their objective very well: " ... to produce an informative work of interest to persons ranging from the most casual observer at a feeding station to the professional ornithologist." Having lived on the shores of Lake Scugog for much of 1973, I warmly greet this work as a valuable addition and contribution to the knowledge of the birds of that region and of southern Ontario in general.

I would not hesitate to recommend this book as a general reference guide to anyone travelling in southern Ontario.

## RECENT PUBLICATIONS ON THE NATURAL HISTORY OF ALBERTA (13)

Compiled by Martin K. McNicholl

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## PROVINCIAL MUSEUM NEWS FOR NATURALISTS (1)

by D.A.E. Spalding, Head Curator
Natural History Division

New developments in natural history programs at the Provincial Museum of Alberta will in future be brought to the attention of naturalists through a regular news column.

### STAFF CHANGES

Several changes are currently taking place in the curatorial staff of the Section. Curator of Geology, Donald Taylor (well known particularly to Rockhound groups) retired at the end of 1974, and has been replaced in a short-term position by Ron Mussieux. Ron is busy completing a major mineral gallery, featuring fine minerals from the Delp collection.

Curator of Earth Sciences, John Storer, is resigning in October to become Assistant Director at the Saskatchewan Museum of Natural History in Regina. John has completed some important research work at the museum, particularly on the Upper Tertiary fossil vertebrates found in plateau gravels around the province. His Ph. D. thesis was on the Miocene faunas of Wood Mountain in southern Saskatchewan. A new Curator of Paleontology will be sought to replace John.

Perhaps of most interest to Alberta naturalists will be the recent creation of an additional Curator in the field of Ornithology. The new Curator is D.V. (Chip) Weseloh, well-known to Calgary naturalists. Chip will be working on a new bird gallery. Hugh Smith, former Curator of Zoology, will now concentrate on mammals and lower vertebrates.

The botany program, with Curator Julie Hrapko, now has technical assistance from another short-term position, filled by Jan Goodall.

### NATURE ART

Increasing attempts are being made to feature the work of Alberta artists in the Provincial Museum. Edmonton mushroom painter Lene Schalkwyk had an exhibit of her work in the museum during 1974, and this winter a two-man show is planned featuring the work of Hinton artist, Chuck Lacy, and Calgarian Peter Karsten. The tentative period for this is December 1975 to January 1976.

For 1976 an exhibit on owls is planned, to feature the work of as many Alberta nature artists as possible. Tentatively dated for October - December 1976, this will allow owls in a variety of media in two and three dimensions to be shown.

An invitation will be sent nearer the time to all artists on the museum's list of nature artists and selection will be made by a small committee seeking quality, variety of species, media and artists. Additional names for the list, which includes all artists known to museum staff who live in Alberta, regularly create art works featuring natural subjects (including natural landscape), and have had work exhibited or reproduced, may be sent to Head Curator of Natural History, Provincial Museum of Alberta, 12845 - 102 Avenue, Edmonton.

EXTENSION COURSES

The Provincial Museum is again this year sponsoring a number of courses with the University of Alberta Extension Department. One course, entitled 'Wildlife drawing and painting' began in September, and is being given by Ludo Bogaert, of the habitat staff. Ludo's work has been featured from time to time on the cover of the Alberta Naturalist, including this issue.

Another, on Introduction to Alberta Birds, is being given by David A.E. Spalding on ten Mondays, commencing October 6th. This will be followed in the new year by a course on Alberta Shorebirds by Chip Weseloh.

Another member of the museum staff, Andrew Nimmo, is giving a course on Ecology, Environment and Man in the University, on ten Thursdays, commencing October 9th.

Further information on these courses may be obtained from the Department of Extension (432-3035) or the Provincial Museum (452-2150).

## FAN NEWS, REPORTS, PROJECTS

### Hi-lights of the Spring Field Trips & Meeting, May 17-19, 1975
by Helen Schuler, Lethbridge Naturalists' Society

By now everyone should be home, have the ticks combed out, the sunburn treated, and the sand cleared out of their eyes. It was a busy weekend and thanks to the help and T.L.C. (tender loving care for those not familiar with nursing vernacular) of Scotty Scherer the part warden, who I'm sure orchestrated the appearance of wildlife at appropriate intervals, and park naturalist Jim Martin who led us around to see them, about one hundred more people, some from as far away as Manitoba and the Yukon, are now much more aware of Writing-On-Stone.

After registration on Saturday, while the poor executive slaved away indoors, the rest were taken by Jim Martin on a walking tour around the cliffs where the various petroglyphs and pictographs were pointed out and explained. On our way we encountered some of the prairie wildflowers such as both mauve and white moss phlox and a gorgeous patch of shooting stars. Also on that hike were noted such interesting sights as a velvet wasp carrying around her paralyzed prey, looking for a place to tuck it so she could lay her egg on it, a bullsnake, a couple of rattlers and a golden mantled marmot whistling at us from the top of the cliffs.

That evening everyone repaired to Masinasin School for a slide show by Tommy Willock of Milk River who showed us some beautiful photography on a variety of themes including some wildlife. Before the slide show someone discovered Burrowing Owls near the school and shutterbugs and birdwatchers had a ball, until the owls became tired of people-watching and retired down their hole.

Sunday a.m. those in the campground were treated to a wonderful dawn chorus, and the birdwatchers were up and at 'em by 7:00 to see all the birds which frequented the campground area. Towhees and Brown Thrashers both gave full concerts - as did many others. We just had time to pack a lunch then and take off in a cavalcade, again led by our intrepid young naruralist guide, up to the south end of Police Coulee. There we straggled down into the rocky canyon, some chasing insects, some ticks, some photographing birds or flowers, others just gawking. Our guide - with incredible patience - shepherded us down the coulee, lugging a plank as a bridge and getting us across various creek crossings without dumping anyone - well, almost. We ate our lunch on a flower-strewn slope while the younger and more ambitious (and wind-resistant) took off on the topland to see an eyrie.

Back to camp again and a weiner roast. On the way to the school for the evening slide show the group was treated to the sight of antelope resting and grazing near the road. The slide show that night was presented by Jim Carpenter of the Lethbridge Archaeological Society who gave a talk on petroglyphs and their interpretation. It should be much appreciated that - because of the size of the turnout - both guest speakers gave their presentations twice in order that all could see them.

A cruise around a waterfowl area had been planned for Monday morning but the weather didn't cooperate and most people after waking up with an inch of snow on their tents were ready to head for home. Certainly by now many are convinced that the much publicized vagaries of southern Alberta weather isn't just a myth, but being hardy types they're probably already planning for the next field meeting for later summer and fall.

Hi-lights of the 16th Regular Meeting, Board of Directors
Held near Writing-on-Stone Provincial Park

by Teresa Delane, Lethbridge Naturalists' Society

- Mr. Lyman Matthews has been appointed as corresponding secretary. Mr. Matthews has compiled a FAN membership list which will, among other things, hopefully eliminate problems of oversight in the distribution of the Alberta Naturalist.
- To simplify matters for our treasurer, FAN's financial year will now correspond to the calendar year.
- Our 1974 operating grant from the provincial government has been received and we are in the process of applying for a 1975 grant.
- Resolutions passed:
  a) That FAN supports the resolution presented by the Fish and Game Association that the government of Alberta offer financial encouragement to land owners to preserve wildlife habitat.
  b) That FAN is seriously concerned about the lack of information available to the general public regarding the purpose and implications for the proposed Red Deer River flow regulation program.
  c) That FAN is concerned over the recent ERCB report which gives high priority to the extraction of coal in the Eastern Slopes and which indeed overestimates the supply of those reserves.

NEW BOARD OF DIRECTORS:

A report on highlights of the 17th Regular Meeting of the Board of Directors and Fifth Annual General Meeting, held at Banff, on 20th of September 1975, will be prepared by Dr. John M. Powell for the next issue of A.N. The new Board is listed on the inside back cover of this issue. One Director position from the Edmonton Bird Club is currently vacant, since Jim Wolford has left for the East coast.

Chairmen of Standing Committees are: Publications - M.K. McNicholl; Publicity - Dr. J.M. Powell; Wilderness, Parks & Natural Areas - M. McIvor; Environmental Education - J. Finlay; Endangered Species - J. Minty; Research - Dr. C.D. Bird; Finance - D. Broadbent; By-laws and Resolutions - Dr. F. Harper. Lloyd Lohr remains Chairman of the Naturalists' Guide Committee; Jim Minty is FAN's representative to the Canadian Nature Federation and also to the International Council for Bird Preservation; and John Powell continues as our representative on the E.C.A. Public Advisory Committee. - M.K.M.

## LATE ALBERTA NATURALIST

Our apologies for a late FAN. Unfortunately our Editor, Virginia Lang, was not able to compile this issue, so one Associate Editor (M.K.M.) has had to prepare this number in his very few spare moments. We hope the next issue will be back on schedule. Several interesting items are already on hand for it. - M.K.M.

## CLUB NEWS

### Bow Valley Naturalists

by Jon Whyte

Dr. Peter Lester has looked at clouds from both sides. He's a meteorologist and a soar-planer, and he believes that it's one thing to look at clouds and the weather from the ground, and it's quite another to get up in the turbulence and the wind and experience moving air.

Dr. Lester spoke to the Bow Valley Naturalists in Banff at their February meeting. Mountain meteorology, he said, is one of the toughest types of weather analysis. Scientists like to work with laboratory conditions where the collected data can be evaluated. In lieu of labs they like to work where conditions can be easily evaluated. The confusion of valleys, ridges, and altitudes makes the collection of data extremely difficult. Consequently few meteorologists or climatologists consider doing work in mountainous areas.

In his work at the Kananaskis Environmental Sciences Centre, Dr. Lester has already done a preliminary work on the climatology of the Kananaskis Valley, with an analysis of winds and temperatures at a number of stations. But, he said, the area is still scantily described.

Vast generalizations are made about the Rockies on the basis of stations in Banff, Lake Louise, Saskatchewan Crossing and Jasper, and three of the four are at similar altitudes.

He'd like to work with naturalists and ornithologists, principally because the evidence provided by the ways in which birds move and soar could tell him a great deal about the moving air. The birds have to know about the movements for their survival.

It's a tough field, Mountain Meteorology, but he likes the sound of it.

## EDMONTON BIRD CLUB

The EBC winter program is not yet finalized, but all members of other FAN clubs are welcome to attend while in Edmonton. Meetings are on the third Friday of the month at 8:15 p.m. in Room 245 of the Agriculture Building on the University of Alberta campus. At the September meeting, Graeme Greenlee was re-elected President and Barbara Robinson became Vice-President. The Annual General Meeting was followed by a Members' Night presentation of slides. The October meeting will feature Geoff Hogan on "Colonial birds of Prince Edward Island." - M.K.M.

## EDMONTON NATURAL HISTORY CLUB

The ENHC winter program is open to all visitors. Meetings are on the second Tuesday of each month at 7:30 p.m. in the main Auditorium of the Provincial Museum. President Jim Wolford accepted a position in the Maritimes commencing September 1, so Vice-President Marg Reine will act as President until the Annual General Meeting in January. The following winter program is planned: September 9 - Members' Night; October 18 - Edgar T. Jones, films on "Alberta Outdoors" and "Arctic Outpost Camp;" November 4 - Terry Thormin, "Nature in Central America;" December 9 - Ed Telfer, "Big game ecology in the boreal forest;" January 13 - Dr. Rostocker, "Astronomy - Northern Lights - Violence in the sky;" Annual General Meeting, and Presentation of the 1st Annual Loran L. Goulden Memorial Award; February 10 - Dr. I. Stirling, "The natural history of Polar Bears and Seals in the Arctic;" March 9 - Drake Hocking, "Environmental hazards in the Athabasca tar sands;" April 13 - Dr. C.D. Bird, "Spring blooming wild flowers;" May 11 - Julie Hrapko, "To Russia with botany."

Secretary Gail Bembridge reports on activities from January to May as follows:

Having assumed the position of Secretary for the Edmonton Natural History Club in January 1975, I will report on Club activities from that date.

The Club has set up a committee to present Club views and suggestions to the consultants for the Capital City Parks Plan, an area incorporating river bank areas and several ravines throughout the city.

A Club member instituted distribution of a form letter signed by individual Club members and sent to Jud Buchanan regarding objections to the allotment of Wood Buffalo Park lands to the Cree Indian Band, our fears being the precendent such a move would make.

We plan to set up accumulation of Club printed material, collected over the years, in the City Archives, providing access to material for Club members.

We plan a joint canoe field trip in September on the Red Deer River with the Red Deer, Stettler and Edmonton Bird Clubs, to explore the proposed dam site area.

Field trips have included a trip to the University fossil museum with a lecture by a student on "digs;" a "behind the scenes" look at the Provincial Musuem; a walk around the Menistik Hills Field Centre (Dr. L. Fenna's); a joint trip with the Stettler and Red Deer Clubs to Buffalo Lake; and study nights on such subjects as bird identification, bird photography, Indian artifacts and local plant and mushroom identification.

ALBERTA NATURAL HISTORY SOCIETY - by Geoff Broadbent, President

The Alberta Natural History Society is concerned about the provincial government's plans to build a $43 million dam on the Red Deer River, probably in the Spruce View-Raven area. It is estimated 4,380 acres will be flooded providing a shoreline of 22 miles. Some of this land is under cultivation, but 2,200 acres is natural vegetation, most of this is valuable wildlife habitat and vital ungulate wintering range.

There is adequate water in the Red Deer River to supply a city twice the size of Red Deer, yet the people of Red Deer believe that a reservoir is needed for domestic comsumption. Public ECA hearings into the location of the dam are to take place in June 1975.

Large multi-national petrochemical companies are buying land along the Red Deer River. Construction of the first plant is scheduled to begin in May, according to the local newspaper. Representatives of these firms are already buying houses in Red Deer.

Great industrial expansion is obviously being planned for Red Deer without the knowledge of the residents. The A.N.HS is concerned about the effects of water impoundment and pollution prone industries on the Red Deer River corridor. We question the wisdom of stimulating industrial growth and urban expansion on prime farmland. We are especially disturbed about the disastrous consequences to the wildlife populations of the region.

We appeal for the support of any individual or group who feel strongly about the need to protect our environment and retain the high quality of life in this beautiful province. Please write to your M.L.A., the Premier, the Minister of Lands and Forest.

## NOTES AND NEWS

compiled by M.K.M.

### SCOTTER, NEW PRESIDENT OF CNF

Dr. George Scotter of Edmonton was elected President of the Canadian Nature Federation at its Annual General Meeting in Victoria, B.C. this last June. Dr. Scotter's excellent presentations on the Nahanni region of the Yukon at naturalist meetings across Canada a few years ago undoubtedly played a significant role in the establishment of a National Park there. He was also active in the Village Lake Louise controversy. Although a botanist by profession, he has published on other areas of natural history as well, reflecting a general interest in nature. We wish him well in his new role as CNF President.

### CANADIAN NATURE FEDERATION NEEDS SUPPORT

At the Victoria meeting of CNF, we learned that CNF is in serious financial trouble. If the Canadian Nature Federation cannot survive, this will be a serious blow to all naturalist and nature organizations in Canada, as the naturalists' viewpoint on all environmental issues would be weakened by apparent lack of concern by other naturalists. We strongly urge all FAN members to join CNF, give memberships as Christmas gifts, give donations if possible, and shop for gifts through the CNF bookstore.

Membership rates are: Regular $10.00; Family $12.00; Sustaining $25.00; Active $100.00; Supporting $250.00; Contributing $1,000.00. The CNF address is: 46 Elgin Street, Ottawa, Ontario K1P 5K6. Directors resident in Alberta are: Martin K. McNicholl (Provincial Director), Jim Minty (FAN Representative), and George S. Scotter (National Director and President).

## BANFF TOWNSITE

According to Parks for Tomorrow 3(2): 2 more self-government is planned for Banff townsite, with a Provisional Administrative Board now studying its feasibility and examing leasehold problems.

## CARSELAND PROVINCIAL PARK

A visitors' guide to this park is now in preparation by the Calgary-Banff Chapter of the National and Provincial Parks Association of Canada. Naturalists wishing copies or information on the park should contact Bob Scace, Chairman Calgary-Banff Chapter NPPAC, Box 608, Sub P.O. 91, University of Calgary, Calgary, Alberta T2N 1N4.

## POWERLINE HAZARD REDUCED

Electrocution of birds, especially raptors, on powerlines has been the subject of several recent journal notes, and appears to be a very real hazard. Golden Eagles in particular appear to be subject to this form of death. Methods of reducing this problem are currently under study by raptor specialists in the U.S.A., employed by various power companies and wildlife departments. A progress report recently published by Edison Electric Institute is available from Raptor Research Foundation, Inc., Department of Zoology, 167 WLBD, Brigham Young University, Provo, Utah 84601, U.S.A. The reference is:

> Miller, D., E.L. Boeker, R.S. Thorsell, and R.R. Olendorff. 1975. Suggested practices for raptor protection on powerlines. New York, Edison Electric Institute. 21 pp.

## BUTTERFLY ENDANGERED LIST

A note in Nature Canada 4(3): 18, 1975 mentions plans by the U.S. Department of the Interior to place 41 species of butterfly on an endangered species list, and to implement regulations protecting them. No such list is planned for Canada at present, but public pressure could probably initiate such plans.

## LACK OF FUNDS FOR BIOLOGY

A recent address by Dr. D.A. Chant, President of the Canadian Society of Zoologists, outlines the critical shortage of funding for biological research in Canada. In the past 5 years total Canadian university undergraduate enrollment has increased 19%, that in biology 82%! Yet budgets for biology departments have been cut. Similarly research grants for biology have decreased 41% in terms of buying power, at a time when biology is in heavy demand. Thus biological research in Canada is being severely curtailed.

## EASTERN SLOPES POLICY DEBATE

The September 1975 issue of the Newsletter of the Edmonton Chapter of the National and Provincial Parks Association of Canada carries considerable dialogue between Dr. Graham C.D. Griffiths, Past Chairman of the Chapter, and governments officials concerning policy on the Eastern Slopes. The Energy Resources Conservation Board is advocating considerably less protection than recommended by the Environment Conservation Authority, which agency bases at least some if its recommendations on public feeling. The matter is, to date, far from resolved.

## SENIOR CITIZENS IN PROVINCIAL PARKS

A proposed amendment to the Alberta Provincial Parks Act will allow pensioners free use of facilities in Alberta's Provincial Parks, according to a news item in the Newsletter of the Edmonton Chapter of the National and Provincial Parks Association of Canada 7(1): 1, 1975.

## RECENT PRAIRIE NATURAL HISTORY BOOKS

Several books of interest to prairie naturalists have recently been published. In Alberta, the bird report by John M. Powell, Tom S. Sadler, and Margaret Powell listed under Recent Literature in the issue of A.N. can be obtained from Northern Forest Research Centre, Canadian Forestry Service, Environment Canada, 5320 - 122 Street, Edmonton, Alberta T6H 3S5. "Alberta birds 1961-1970 with particular reference to migration" by T.S. Sadler and M. T. Myres is now in press at Prov. Mus. & Arch. Alberta Publ. No. 5. A revised "Birds of Alberta" by W. Ray Salt is in final stages of preparation, and C. D. Bird's volume on the butterflies of Alberta should soon be available.

The Saskatchewan Natural History Society has recently published two Special Publications: "Blue Jay index 1961-1969 (Volumes 19 through 27)", S.N.H.S. Special Publ. No. 8, 67 pp., $3.00; and "Birds of the Rosetown-Biggar District, Saskatchewan" by Wayne E. Renaud and Don H. Renaud, S.N.H.S. Special Publ. No. 9, 121 pp., $4.00. These may be ordered from S.N.H.S. at Box 1121, Regina, Saskatchewan. In Manitoba, "The birds of Manitoba" by E.E. Thompson (Seton), 1891, has been reprinted in a limited edition of 1000 copies, available for $4.00 while the supply lasts from Premium Ventures Ltd., 235 Garry Street, Winnipeg, Manitoba. "Manitoba bird studies, a bibliography of Manitoba ornithology" by Martin K. McNicholl is available from Province of Manitoba, Dept. of Mines Resources and Environmental Management, Box 9, 989 Century Street, Winnipeg, Manitoba R3H OW4 free.

## CANADA SUPPORTS REDUCTION IN WORLD WHALING

LONDON, England - The International Whaling Commission has made significant progress in bringing world whale stocks under sound resource management, Canada's Whaling Commissioner Dr. W.R. Martin said here recently.

Whale catches in 1976 will be reduced by about 9,000 whales, a 25 per cent decrease from this year, as a result of quotas and stock moratoria adopted at the annual meeting of the 15 member Commission. Quotas covering all stocks next year will total approximately 28,000 whales as compared to 37,300 this year.

"Canada is maintaing its 1972 ban on all commercial whaling and will not take advantage of a new quota allowing a catch of 90 fin whales off Newfoundland in 1976," said Dr. Martin.

This decision means no country will take fin whales off Canada's Atlantic Coast next year. Whaling in the North Atlantic is only permitted by land-based whalers. Another fin whale stock off Nova Scotia was classed by the Commission as protected by moratorium.

Quotas were established for the first time for all North Atlantic stocks. Canada expressed reservation about a quota of 550 minke whales set for the Northwest Atlantic and will seek a review of scientific data on this stock next year.

Success was also attained in establishing a total moratorium on taking of fin and sea whales in the North Pacific Ocean. A reduced quota for sperm whales in the North Pacific was also set.

"During the Commission meetings Canada consistently supported proposals believed capable of achieving the objective of reducing whale catches in 1976 to the lowest level that could be put into effect," Dr. Martin said.

"The Commission has now established a solid basis for managing whale stocks in accordance with sound resource conservation principles and competent scientific advice," he said.

"All those concerned with the preservation of whales must welcome this result," Dr. Martin said.

## REQUESTS FOR INFORMATION

Don Bedard is compiling a naturalist's library for the Fish and Game Association. It will be available for schools and groups as well as an aid for hunter training. He is willing to buy slides or pay for good copies of slides of the following species.

### All Upland Game Birds

Blue Goose, Black Brant, Gadwall, Shoveler, Green Winged Teal, Cinnamon Teal, Ruddy Duck, Ring Necked Duck, White Winged Scoter, Surf Scoter, Bufflehead, Lesser Scaup, Common Merganer, Red Breasted Merganser, Wilson's Snipe, Sandhill Crane.

Contact: Don Bedard, #44, 251 - 90 Avenue, Calgary, Alberta
Phone: 253-5288.

### Mammals

Barren Ground Caribou, Woodland Caribou, Fisher, Red Squirrel, Arctic Fox, Coloured Fox, Badger, Marmot, Golden Mantled Marmot, Jack Rabbit, Grizzly Bear.

### Fish

Brook Trout, Cut Throat Trout, Arctic Grayling, Lake Trout, Walleye, Kokanee, Sisko, Gold Eye, Common Sucker, Northern Sucker, Sturgeon, Lake White Fish, Burbot.

Over 7,100 Brown-headed Cowbirds were branded and color-marked in west-central Kansas during 1974 as an aid in studying their movements and hopefully to determine their place of origin. Birds were marked with red, yellow, or green plastic leg streamers. Fall and winter observations revealed 27 individuals from ten locations in Kansas, Oklahoma, Texas, and Mexico. However, data from spring and summer movements are needed. Observers should report location and date of sighting, sex of bird, and color of leg streamer to Richard A. Hill, Department of Biology, Fort Hays Kansas State College, Hays, Kansas 67601.

1974 completes the final year of banding for this study. The number of observations has been very encouraging. With your assistance I am very optomistic about reports of spring and summer movements of color-marked cowbirds.

## OVERHEARD (46)

### They Didn't Listen

"--water, even in its best obtainable form, is an agent by which invisible and even indiscoverable germs of potent poison may be transmitted from place to place and from great distances, to the detriment of human life. The naturalist who traffics among those atoms of life can say with a warning voice that he finds the most favourable conditions for their existence and increase in waters polluted more or less by sewage, and putrid animal and vegetable matters. If citizens and statesmen will listen to the voice of science, they will do their utmost to prevent the pollution of the sources of our water supply."

- Rev. A.F. Kemp, Ottawa, 1882.

The Alberta Naturalist is published quarterly by the Federation of Alberta Naturalists. Any material printed for the first time in the AN may be reproduced without permission. Credit lines will be appreciated.

Deadlines for submission of material to the Editor are: February 15, May 15, August 10 and November 15. Please include your address. All maps, charts, etc., should be submitted on white paper, of the appropriate size for publication, preferably done in type and/or india ink.

FAN membership fees are $2.00 per year regular, $10.00 supporting, tax deductible ($8.00 worth). Mail remittance to: Alberta Naturalists, Box 1472, Edmonton, Alberta T5J 2N5.

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